

AMENDMENTS TO THE CLAIMS:

Claims 1 - 18 (**Canceled**)

19. **(Amended)** An alignment apparatus for ~~lateral~~ laterally aligning an eye with respect to said apparatus comprising:

a central light source;

a partially reflecting concave mirror having an optical axis passing therethrough, said central light source centrally disposed along said optical axis such that at least a portion of said light from said central light source propagates through said partially reflecting concave mirror along said optical axis;

first and second offset light sources disposed in a plane passing through said optical axis, said first and second offset light sources on opposite sides of said optical axis, said first and second offset light sources emitting light at an oblique angle toward said optical axis.

20. **(Original)** The alignment apparatus of Claim 19, wherein said central light source comprises a light emitting diode.

21. **(Original)** The alignment apparatus of Claim 19, wherein said partially reflecting concave mirror comprises a metalized mirror.

22. **(Original)** The alignment apparatus of Claim 19, wherein said first and second

offset light sources comprise light emitting diodes.

23. **(Original)** The alignment apparatus of Claim 19, wherein said first and second offset light sources are spaced apart from said optical axis by equal distances.

24. **(Original)** The alignment apparatus of Claim 19, wherein said first and second offset light source have respective positions and orientations such that said light emitted from said light sources is substantially directed toward a common point on said optical axis.

25. **(Original)** A method of aligning a device with respect to a cornea, said cornea having a substantially spherical curvature defined by a center of curvature, said method comprising:

propagating light toward said cornea, said light having substantially spherical wavefronts defined by a center of curvature that is substantially coincident with said center of curvature of said cornea;

retroreflecting a portion of said light from said cornea;

collecting said retroreflected light; and

focusing said collected light on an optical detector having a photosensitive area such that when said center of curvature of said wavefronts is substantially coincident with said center of curvature of said eye, said light focused on said photosensitive area has a different intensity than when said respective centers of curvature are non-coincident.

26. **(Original)** The method of Claim 25, further comprising covering at least a portion of said optical detector such that when said center of curvature of said wavefronts is non-coincident with said center of curvature of said eye, said light incident on said photosensitive area is reduced.

27. **(New)** An alignment apparatus for laterally aligning an eye with respect to said apparatus comprising:

- a) a central light source for providing a light beam;
- b) a partially reflecting concave mirror having an optical axis passing therethrough, said central light source being centrally disposed along the optical axis to propagate at least a portion of the light beam through said partially reflecting concave mirror along the optical axis; and
- c) first and second offset light sources disposed in a plane passing through the optical axis, said first and second offset light sources being disposed on opposite sides of the optical axis to emit light at an oblique angle toward the optical axis.

28 **(New)** The alignment apparatus as set forth in Claim 27 wherein said central light source comprises a light emitting diode.

29. **(New)** The alignment apparatus as set forth in Claim 27 wherein said partially reflecting concave mirror comprises a metalized mirror.

30. (New) The alignment apparatus as set forth in Claim 27 wherein said first and second offset light sources comprise light emitting diodes.

31. (New) The alignment apparatus as set forth in Claim 27 wherein said first and second offset light sources are spaced apart from said optical axis by equal distances.

32. (New) The alignment apparatus as set forth in Claim 27 wherein said first and second offset light source have respective positions and orientations to emit light directed substantially toward a common point on the optical axis.

33. (New) A method for aligning a device with respect to a cornea having a substantially spherical curvature defined by a center of curvature, said method comprising the steps of:

- a) propagating light toward the cornea, which light has substantially spherical wavefronts defined by a center of curvature substantially coincident with the center of curvature of the cornea;
- b) retroreflecting a portion of the light from the cornea;
- c) collecting the retroreflected light; and
- d) focusing the collected light on an optical detector having a photosensitive area to produce a different intensity of light on the photosensitive area when the respective centers of curvature of the wavefronts of light and of the eye are non-coincident.

34. (New) The method as set forth in Claim 33 including the step of covering at least a

portion of the optical detector to reduce the light incident on said photosensitive area when the center of curvature of the wavefronts is non-coincident with the center of curvature of the eye.

35. (New) A method for laterally aligning an eye with an alignment apparatus, said method comprising the steps of:

- a) providing a central light source;
- b) propagating at least a portion of light from the central light source through a partially reflecting concave mirror having an optical axis passing therethrough, the central light source being disposed along the optical axis to cause light propagation through the partially reflecting concave mirror along the optical axis; and

- c) emitting light at an oblique angle toward the optical axis from first and second offset light sources disposed in a plane passing through the optical axis and on opposite sides of the optical axis.

36. (New) The method as set forth in Claim 35 including the step of emitting the first and second offset light sources are spaced apart from the optical axis by equal distances.

37. (New) The method as set forth in Claim 35 including the step of emitting light from the first and second offset light sources substantially toward a common point on the optical axis.